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> s antibody () agonist
        407833 ANTIBODY
         77218 AGONIST
L12          2 ANTIBODY (W) AGONIST

=> d l12 ti abs ibib tot

L12  ANSWER 1 OF 2     MEDLINE
TI   Prolidase activity in fibroblasts is regulated by interaction of
     extracellular matrix with cell surface integrin receptors.
AB   Prolidase (EC 3.4.13.9) is a ubiquitously distributed imidodipeptidase
     that catalyzes the hydrolysis of C-terminal proline or hydroxyproline
     containing dipeptides.  The enzyme plays an important role in the
     recycling of proline for collagen synthesis and cell growth.  An increase
     in enzyme activity is correlated with increased rates of collagen turnover
     indicative of extracellular matrix (ECM) remodeling, but the mechanism
     linking prolidase activity and ECM is poorly understood.  Thus, the effect
     of ECM-cell interaction on intracellular prolidase activity is of special
     interest.  In cultured human skin fibroblasts, the interaction with ECM
     and, more specifically, type I collagen mediated by the beta 1 integrin
     receptor regulates cellular prolidase activity.  Supporting evidence comes
     from the following observations: 1) in sparse cells with a low amount of
     ECM collagen or in confluent cells in which ECM collagen was removed by
     collagenase (but not by trypsin or elastase) treatment, prolidase activity
     was decreased; 2) this effect was reversed by the addition of type I
     collagen or beta 1 integrin antibody (agonist for beta
     1 integrin receptor); 3) sparse cells (with typically low prolidase
     activity) showed increased prolidase activity when grown on plates coated
     with type I collagen or on type IV collagen and laminin, constituents of
     basement membrane; 4) the relative differences in prolidase activity due
     to collagenase treatment and subsequent recovery of the activity by beta 1
     integrin antibody or type I collagen treatment were accompanied by
     parallel differences in the amount of the enzyme protein recovered from
     these cells, as shown by Western immunoblot analysis.  Thus, we conclude
     that prolidase activity responded to ECM metabolism (tissue remodeling)
     through signals mediated by the integrin receptor.
ACCESSION NUMBER:    97469360     MEDLINE
DOCUMENT NUMBER:     97469360    PubMed ID: 9328822
TITLE:               Prolidase activity in fibroblasts is regulated by
                     interaction of extracellular matrix with cell surface
                     integrin receptors.
AUTHOR:              Palka J A; Phang J M
CORPORATE SOURCE:    Laboratory of Nutritional and Molecular Regulation,
                     National Cancer Institute-Frederick Cancer Research and
                     Development Center, Maryland 21702, USA.
SOURCE:              JOURNAL OF CELLULAR BIOCHEMISTRY, (1997 Nov 1) 67 (2)
                     166-75.
                     Journal code: 8205768. ISSN: 0730-2312.
PUB. COUNTRY:        United States
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
ENTRY MONTH:         199712
ENTRY DATE:          Entered STN: 19980109
                     Last Updated on STN: 20000303
                     Entered Medline: 19971208

L12  ANSWER 2 OF 2     MEDLINE
TI   TNF and its receptor antibody agonist differ in
     mediation of cellular responses.
AB   TNF binds to two distinct receptors designated p60 and p80.  Because Abs
     to the p60 receptor (anti-p60) can mimic TNF, we therefore compared the
     cellular signaling of TNF with that of anti-p60.  We demonstrate both
     qualitative and quantitative differences between TNF and anti-p60.  HepG2
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cells, which express the p60 receptor, were found to be completely resistant to TNF but highly sensitive to the antiproliferative effects of anti-p60. In contrast, normal fibroblasts were found to be several fold more sensitive to TNF than to anti-p60. Several other epithelial cell lines that also express primarily the p60 receptor showed quantitative differences in mediation of cellular responses by TNF and anti-p60. The blocking of the p60 receptor by TNF had no effect on the response of HepG2 cells to anti-p60, suggesting a difference in their binding sites. Anti-p60, however, inhibited the effect of TNF on fibroblasts. Ab against the p80 receptor had no effect by itself or on the effect of TNF and anti-p60. The difference in the response to TNF and anti-p60 could not be correlated to the differences in the level of expression of p60 receptor on these cells. Furthermore, cycloheximide potentiated the TNF-mediated effect but not that mediated through anti-p60, thus also indicating a difference in the mechanism of action of these two agents. Overall, these results demonstrate that TNF and anti-p60, although both working through the p60 receptor, differ in their cellular signaling.

ACCESSION NUMBER: 94327960 MEDLINE
DOCUMENT NUMBER: 94327960 PubMed ID: 8051422
TITLE: TNF and its receptor **antibody agonist** differ in mediation of cellular responses.
AUTHOR: Totpal K; LaPushin R; Kohno T; Darnay B G; Aggarwal B B
CORPORATE SOURCE: Department of Clinical Immunology and Biological Therapy, University of Texas M. D. Anderson Cancer Center, Houston 77030.
SOURCE: JOURNAL OF IMMUNOLOGY, (1994 Sep 1) 153 (5) 2248-57. Journal code: 2985117R. ISSN: 0022-1767.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199409
ENTRY DATE: Entered STN: 19940914
Last Updated on STN: 19970203
Entered Medline: 19940906

=> d his

(FILE 'HOME' ENTERED AT 12:37:54 ON 20 MAY 2003)

FILE 'MEDLINE' ENTERED AT 12:41:14 ON 20 MAY 2003

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L1           184 S MSUD
L2            26 S L1 AND AGE
L3             6 S L1 AND ONSET
L4        407833 S ANTIBODY
L5         77218 S AGONIST
L6        104372 S ANTAGONIST
L7         28763 S L4 AND FUNCTION
L8          9268 S L5 AND FUNCTION
L9         10686 S L6 AND FUNCTION
L10          252 S L7 AND L8
L11           46 S L10 AND L9
L12            2 S ANTIBODY () AGONIST

=> s antibody () antagonist
        407833 ANTIBODY
        104372 ANTAGONIST
L13          3 ANTIBODY (W) ANTAGONIST

=> d l13 ti abs ibib tot

L13  ANSWER 1 OF 3     MEDLINE
TI   Reduced intimal thickening following alpha(v)beta3 blockade is associated
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with smooth muscle cell apoptosis.

AB The adhesion integrin alpha(v)beta3 is expressed by both activated endothelial cells (ECs) and smooth muscle cells (SMCs). Peptide and antibody antagonists of alpha(v)beta3 have been shown to block angiogenesis by initiating unscheduled programmed cell death of proliferating ECs. The present study was designed to determine if antagonism of alpha(v)beta3 immediately following balloon injury might similarly lead to programmed cell death among activated SMCs, and thereby inhibit intimal thickening. LM609, a monoclonal **antibody antagonist** of alpha(v)beta3, was administered locally and/or systemically immediately after balloon angioplasty in a rabbit model of vascular injury. Immunohistochemical studies documented that LM609, even when administered systemically, localized to sites of vascular injury. LM609 administered immediately following balloon injury of the external iliac artery markedly reduced intimal thickening at 2 and 4 wk post-injury. Apoptosis was abundant where balloon injury resulted in expression of alpha(v)beta3. At both 2 and 4 wk, re-endothelialization at the site of balloon injury was not retarded in LM609-treated rabbits versus controls. Thus, blockade of alpha(v)beta3 inhibits intimal thickening when administered immediately following balloon injury. This favorable impact on neointimal thickening is associated with apoptosis of activated SMCs expressing alpha(v)beta3. These findings may explain the reduction in restenosis observed clinically following beta3 integrin blockade.

ACCESSION NUMBER: 1999237864 MEDLINE
DOCUMENT NUMBER: 99237864 PubMed ID: 10223353
TITLE: Reduced intimal thickening following alpha(v)beta3 blockade is associated with smooth muscle cell apoptosis.
AUTHOR: van der Zee R; Murohara T; Passeri J; Kearney M; Cheresh D A; Isner J M
CORPORATE SOURCE: Department of Biomedical Research, St. Elizabeth's Medical Center, Tufts University, School of Medicine, Boston, MA 02135-2997, USA.
CONTRACT NUMBER: CA50286 (NCI)
HL-02824 (NHLBI)
HL-40518 (NHLBI)
+
SOURCE: CELL ADHESION AND COMMUNICATION, (1998) 6 (5) 371-9. Journal code: 9417027. ISSN: 1061-5385.
PUB. COUNTRY: Switzerland
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199907
ENTRY DATE: Entered STN: 19990727
Last Updated on STN: 19990727
Entered Medline: 19990709

L13 ANSWER 2 OF 3 MEDLINE

TI Integrin alpha v beta 3 antagonists promote tumor regression by inducing apoptosis of angiogenic blood vessels.

AB A single intravascular injection of a cyclic peptide or monoclonal **antibody antagonist** of integrin alpha v beta 3 disrupts ongoing angiogenesis on the chick chorioallantoic membrane (CAM). This leads to the rapid regression of histologically distinct human tumors transplanted onto the CAM. Induction of angiogenesis by a tumor or cytokine promotes vascular cell entry into the cell cycle and expression of integrin alpha v beta 3. After angiogenesis is initiated, antagonists of this integrin induce apoptosis of the proliferative angiogenic vascular cells, leaving preexisting quiescent blood vessels unaffected. We demonstrate therefore that ligation of integrin alpha v beta 3 is required for the survival and maturation of newly forming blood vessels, an event essential for the proliferation of tumors.

ACCESSION NUMBER: 95094291 MEDLINE

DOCUMENT NUMBER: 95094291 PubMed ID: 7528107
TITLE: Integrin alpha v beta 3 antagonists promote tumor regression by inducing apoptosis of angiogenic blood vessels.
AUTHOR: Brooks P C; Montgomery A M; Rosenfeld M; Reisfeld R A; Hu T; Klier G; Cheresh D A
CORPORATE SOURCE: Department of Immunology, Scripps Research Institute, La Jolla, California 92037.
CONTRACT NUMBER: CA45726 (NCI)
CA50286 (NCI)
T32 AI 072 44-11 (NIAID)
SOURCE: CELL, (1994 Dec 30) 79 (7) 1157-64.
Journal code: 0413066. ISSN: 0092-8674.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199501
ENTRY DATE: Entered STN: 19950215
Last Updated on STN: 19970203
Entered Medline: 19950123

L13 ANSWER 3 OF 3 MEDLINE
TI A mitogenic peptide amide encoded within the E peptide domain of the insulin-like growth factor IB prohormone.
AB We have identified an amino acid sequence within the E peptide of the insulin-like growth factor IB (IGF-IB) precursor that is biologically active and designated this peptide insulin-like growth factor IB-(103-124) E1 amide (IBE1). Its existence was predicted by a flanking Gly-Lys-Lys-Lys, a signal sequence for sequential proteolytic cleavage and peptidyl C-terminal amidation. A synthetic analog of the predicted IBE1 peptide, designated Y-23-R-NH2, was generated with tyrosine added at position 0. This peptide at 2-20 nM had growth-promoting effects on both normal and malignant human bronchial epithelial cells. Y-23-R-NH2 bound to specific high-affinity receptors (Kd = 2.8 +/- 1.4 x 10(-11) M) present at 1-2 x 10(4) binding sites per cell. Ligand binding was not inhibited by recombinant insulin or recombinant IGF-I. Furthermore, a monoclonal **antibody antagonist** to the IGF-I receptor (alpha IR3) did not suppress the proliferative response induced by Y-23-R-NH2. In addition, C-terminal amidation was shown to be important in receptor recognition since the free-acid analog of IBE1 (Y-23-R-OH) did not effectively compete for binding and was not a potent agonist of proliferation. Immunoblot analysis of human lung tumor cell line extracts using an antibody raised against Y-23-R-NH2 detected a low molecular mass band of approximately 5 kDa, implying that a protein product is produced that has immunological similarity to IBE1. Extracts of human, mammalian, and avian livers analyzed on an immunoblot with the anti-Y-23-R-NH2 antibody contained proteins of approximately 21 kDa that were specifically recognized by the antiserum and presumably represent an IGF-I precursor molecule. This implies that in species where an IGF-I mRNA with homology to the human IGF-IB E domain has not yet been described, an alternate mRNA must be produced that contains a sequence similar to that of the midportion of the human IGF-IB E domain. Our findings demonstrate that IBE1 is a growth factor that mediates its effect through a specific high-affinity receptor and is most likely conserved in many species.
ACCESSION NUMBER: 92390398 MEDLINE
DOCUMENT NUMBER: 92390398 PubMed ID: 1325646
TITLE: A mitogenic peptide amide encoded within the E peptide domain of the insulin-like growth factor IB prohormone.
AUTHOR: Siegfried J M; Kasprzyk P G; Treston A M; Mulshine J L; Quinn K A; Cuttitta F
CORPORATE SOURCE: Department of Pharmacology, University of Pittsburgh, PA 15261.
CONTRACT NUMBER: CA50694 (NCI)

SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1992 Sep 1) 89 (17) 8107-11. Journal code: 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199210
ENTRY DATE: Entered STN: 19921023
Last Updated on STN: 19970203
Entered Medline: 19921007

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=> d his

     (FILE 'HOME' ENTERED AT 12:37:54 ON 20 MAY 2003)

     FILE 'MEDLINE' ENTERED AT 12:41:14 ON 20 MAY 2003
L1            184 S MSUD
L2             26 S L1 AND AGE
L3              6 S L1 AND ONSET
L4         407833 S ANTIBODY
L5          77218 S AGONIST
L6         104372 S ANTAGONIST
L7          28763 S L4 AND FUNCTION
L8           9268 S L5 AND FUNCTION
L9          10686 S L6 AND FUNCTION
L10           252 S L7 AND L8
L11            46 S L10 AND L9
L12             2 S ANTIBODY () AGONIST
L13             3 S ANTIBODY () ANTAGONIST

=> s antibody () activity
          407833 ANTIBODY
         1121122 ACTIVITY
L14         1969 ANTIBODY (W) ACTIVITY

=> s agonist ()activity
           77218 AGONIST
         1121122 ACTIVITY
L15         2357 AGONIST (W)ACTIVITY

=> s antagonist () activity
          104372 ANTAGONIST
         1121122 ACTIVITY
L16         1694 ANTAGONIST (W) ACTIVITY

=> s l14 not l15
L17         1968 L14 NOT L15

=> s l17 not l16
L18         1968 L17 NOT L16

=> d l18 ti abs ibib 1-5

L18  ANSWER 1 OF 1968     MEDLINE
TI   Human monoclonal macroglobulins with antibody activity
     .
AB   Assays for specific antigen-binding activity were performed on sera from
     172 patients with monoclonal macroglobulinemia defined by immunofixation
     electrophoresis.  The sera were collected between 1970 and 2002.  Mean IgM
     level was 1,409 mg/dL with a range from 70 to 6,800.  Cryoglobulins were
     identified in 15.3% (26/170 sera: 12 trace, five single component, and
     nine mixed IgM-IgG).  Rheumatoid factor (RF) was detected in 19 of 151
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(12.6%) samples with titers ranging from 1:80 to 1:327,680. Among the nine mixed IgM-IgG cryos, eight were RF-positive and six of six displayed positivity for hepatitis C virus. Cold agglutinins (CA) were present in 8.5% (10/117) of sera with anti-I titers between 1:512 and 1:65,536. IgM binding to a series of glycosaminoglycan oligosaccharides, glycolipids, and glycoprotein antigens was found in 75 samples (43%). IgM binding to antigens having known associations to polyneuropathies occurred in 20 patients (12%). Antinuclear antibody (ANA) was documented in 10.7% (18/169) of sera. Anti-DNA activity was absent in all samples tested. Sera from 71% of patients with monoclonal macroglobulinemia in this series exhibited binding to autoantigens. Some of these immune complexes resulted in clinically significant manifestations. Our results suggest that many monoclonal immunoglobulins may be functional antibodies rather than "paraproteins." Characterization of antigen-binding activities may provide insight into the pathogenesis of monoclonal gammopathies. Semin Oncol 30:318-324.

ACCESSION NUMBER: 2003200182 IN-PROCESS
DOCUMENT NUMBER: 22605788 PubMed ID: 12720161
TITLE: Human monoclonal macroglobulins with **antibody activity**.
AUTHOR: Stone Marvin J; McElroy Yolonda G; Pestronk Alan; Reynolds Janet L; Newman Joseph T; Tong Alex W
CORPORATE SOURCE: Baylor Charles A. Sammons Cancer Center and Immunology Laboratory, Baylor University Medical Center, Dallas, TX.
SOURCE: SEMINARS IN ONCOLOGY, (2003 Apr) 30 (2) 318-24. Journal code: 0420432. ISSN: 0093-7754.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20030430
Last Updated on STN: 20030430

L18 ANSWER 2 OF 1968 MEDLINE
TI The relationship of psychological factors to the prognosis of hyperthyroidism in antithyroid drug-treated patients with Graves' disease.
AB OBJECTIVE: The relationship between emotional stress and the onset of hyperthyroidism has been well investigated, but the relationship between psychological factors and prognosis of antithyroid drug-treated hyperthyroidism is not well known. This study has examined not only emotional stresses but also patients' personality traits using specific tests. DESIGN: A prospective cohort study. SUBJECTS: Sixty-nine patients with hyperthyroid Graves' disease in the euthyroid state after 2-5 years of antithyroid drug therapy and 32 healthy subjects as the control group. MEASUREMENTS: Patients responded to three types of questionnaires, including the Minnesota Multiphasic Personality Inventory for personality traits, the Natsume's Stress Inventory for major life events, and the Hayashi's Daily Life Stress Inventory for daily life stresses. RESULTS: In the Graves' disease patients, stress scores of life events correlated significantly with serum TSH receptor **antibody activity** ($r = 0.424$, $P < 0.001$) and thyroid volume ($r = 0.480$, $P < 0.001$). When the patients were divided according to prognosis (41 with relapse and 28 with remission), four personality traits including hypochondriasis, depression, paranoia and psychasthenia (mental fatigue) were significantly ($P = 0.0146$, 0.0052, 0.0125, and 0.0186, respectively) more common in the relapsed Graves' disease group than those of the remitted group. Six personality traits of conversion hysteria, psychopathic deviation, masculinity and feminity, schizophrenia, hypomania, and social introversion were not significantly different between the two groups. The scores of daily hassles (problems of daily life) were also significantly ($P = 0.0124$) greater in the relapsed Graves' disease group than in the remitted group. The scale scores of depression and psychasthenia showed a positive correlation with scores of daily hassles ($r = 0.535$, $P < 0.0001$;

r = 0.580, P < 0.0001, respectively), while an inverse correlation with scores of daily uplifts (r = -0.373, P = 0.0332; r = -0.322, P = -0.0120, respectively). CONCLUSIONS: The results suggest that major life events, personality traits of hypochondriasis and depression, paranoia, mental fatigue, and daily problems aggravate the prognosis of antithyroid drug-treated hyperthyroidism. Escape from life events is virtually impossible; thus coping strategies suggested by the physician may be useful in improving prognosis in Graves' disease.

ACCESSION NUMBER: 2003181238 IN-PROCESS
DOCUMENT NUMBER: 22585997 PubMed ID: 12699435
TITLE: The relationship of psychological factors to the prognosis of hyperthyroidism in antithyroid drug-treated patients with Graves' disease.
AUTHOR: Fukao Atsushi; Takamatsu Junta; Murakami Yasuhiro; Sakane Sadaki; Miyauchi Akira; Kuma Kanji; Hayashi Shunichiro; Hanafusa Toshiaki
CORPORATE SOURCE: First Department of Internal Medicine, Osaka Medical College, Takatsuki, Hirakata City Hospital, Hirakata, Osaka, Kuma Hospital, Kobe, Hyogo, Hayashi Institute for Psycho-Social Stress Research, Tokyo, Japan.
SOURCE: CLINICAL ENDOCRINOLOGY, (2003 May) 58 (5) 550-5. Journal code: 0346653. ISSN: 0300-0664.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20030418
Last Updated on STN: 20030418

L18 ANSWER 3 OF 1968 MEDLINE
TI Use of an ELISA for detection of antibody responses in argentine boa constrictors (Boa constrictor occidentalis).
AB OBJECTIVE: To develop mouse monoclonal and rabbit polyclonal antibodies against immunoglobulin of Argentine boa constrictors and to demonstrate the ability of these reagents to detect antibody responses in boa constrictors by use of an ELISA and western blot analysis. ANIMALS: Two 3-year-old Argentine boa constrictors. Procedure-Boa constrictors were immunized with 2,4-dinitrophenylated bovine serum albumin (DNP-BSA). Each snake received biweekly inoculations of 250 microg of DNP-BSA (half SC, half IP) for a total of 6 inoculations followed by monthly inoculations for 3 months. Preimmune blood samples were collected. Subsequently, blood was collected immediately prior to each booster inoculation. Anti-DNP antibodies were isolated from immune plasma samples by affinity chromatography. Affinity-purified boa anti-DNP immunoglobulin was used for production of polyclonal and monoclonal antibodies. An ELISA and western blot analysis were used to monitor immune responses, for purification of boa anti-DNP immunoglobulin, and for assessment of polyclonal and monoclonal antibody specificity. RESULTS: A 6-fold increase in optical density (OD405) of immune boa plasma, compared with preimmune plasma, was detected by the polyclonal antibody, and a 12- and 15-fold increase was detected by monoclonal antibodies HL1787 and HL1785, respectively, between weeks 4 and 8. Results of western blot analysis confirmed anti-DNP **antibody activity** in immunized boa plasma and in affinity column eluates. Polyclonal and monoclonal antibodies detected specific anti-DNP antibody responses in immunized boas. CONCLUSIONS AND CLINICAL RELEVANCE: Polyclonal and monoclonal antibodies recognized boa constrictor immunoglobulin. These antibodies may be useful in serologic tests to determine exposure of snakes to pathogens.

ACCESSION NUMBER: 2003174969 IN-PROCESS
DOCUMENT NUMBER: 22579264 PubMed ID: 12693526
TITLE: Use of an ELISA for detection of antibody responses in argentine boa constrictors (Boa constrictor occidentalis).
AUTHOR: Lock Brad A; Green Linda G; Jacobson Elliott R; Klein Paul

A
CORPORATE SOURCE: Department of Small Animal Clinical Sciences, College of Veterinary Medicine, University of Florida, Gainesville, FL 32610, USA.
SOURCE: AMERICAN JOURNAL OF VETERINARY RESEARCH, (2003 Apr) 64 (4) 388-95.
Journal code: 0375011. ISSN: 0002-9645.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20030417
Last Updated on STN: 20030417

L18 ANSWER 4 OF 1968 MEDLINE
TI Studies on the effect of specific egg antibodies against Escherichia coli infections in piglets.
AB The effect of chicken egg powder enriched with immunoglobulins specific for rotavirus antigen and fimbrial adhesions F4, F5, F6 of enterotoxigenic Escherichia coli (ETEC) (Globigen 66 S, Lohmann Animal Health, Cuxhaven, Germany) was studied in 465 sucking piglets on a commercial farm. Half of those piglets were given Globigen 66 S as an additive to milk replacer from day 2 until day 12 of life in addition to sows' milk. These piglets showed a higher intake of milk replacer and a lower prevalence of diarrhoea on days 2 and 3 of life. Statistical evaluation showed, that the effect of sows' milk on the duration of diarrhoea and on piglet weight gains was more pronounced than the effect of Globigen 66 S. Anti-ETEC F4-antibody-activities were measured using an indirect ELISA (enzyme-linked immunosorbent assay). There was an inverse relationship between the intensity of diarrhoea and colostral **antibody-activity** (r = -0.2). Comparison of binding affinities of avian and porcine antibodies for F4 showed only a limited common spectrum of epitopes, so, in all probability, they might complement each other in the intestine.
ACCESSION NUMBER: 2003150920 MEDLINE
DOCUMENT NUMBER: 22553564 PubMed ID: 12666498
TITLE: Studies on the effect of specific egg antibodies against Escherichia coli infections in piglets.
AUTHOR: Hennig-Pauka I; Stelljes I; Waldmann K H
CORPORATE SOURCE: Klinik fur kleine Klauentiere und forensische Medizin und Ambulatorische Klinik, Tierarztliche Hochschule Hannover, D-30173 Hannover.. isabel.hennig@tiho-hannover.de
SOURCE: DTW. DEUTSCHE TIERARZTLICHE WOCHENSCHRIFT, (2003 Feb) 110 (2) 49-54.
Journal code: 7706565. ISSN: 0341-6593.
PUB. COUNTRY: Germany: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200304
ENTRY DATE: Entered STN: 20030402
Last Updated on STN: 20030430
Entered Medline: 20030429

L18 ANSWER 5 OF 1968 MEDLINE
TI Effects of unfractionated and low molecular weight heparin on antiphospholipid antibody binding in vitro.
AB OBJECTIVE: To compare the efficacy of unfractionated heparin and low molecular weight heparin in the in vitro binding of antiphospholipid antibodies obtained from the sera of patients with recurrent pregnancy loss. METHODS: Women with immunoglobulin (Ig) G antibodies to the phospholipids cardiolipin and phosphatidylserine were selected based on a positive test by a standard enzyme-linked immunosorbent assay (ELISA). The sera were reassayed for antiphospholipid antibodies in a modified

ELISA using increasing doses of unfractionated heparin or low molecular weight heparin (0, 16, 32, 64, 128, and 256 IU). Sera were fractionated by unfractionated and low molecular weight heparin affinity chromatography to compare the binding avidity and antiphospholipid **antibody activity**. RESULTS: All sera demonstrated a dose-dependent inhibition in measured antiphospholipid **antibody activity** with the addition of unfractionated or low molecular weight heparin. Levels of IgG cardiolipin and IgG phosphatidylserine were significantly inhibited in the presence of 32 IU of low molecular weight heparin (P <.001 and P <.05, respectively) and in the presence of 64 IU of unfractionated heparin (P <.001 and P <.05, respectively). Antiphospholipid antibody binding activity in serum as measured in the ELISA was maximally reduced 76-89% with 256 IU of either heparin derivative. Affinity chromatography with unfractionated or low molecular weight heparin columns absorbed 72% and 66% of IgG cardiolipin activity, respectively, and 46% and 54% of IgG phosphatidylserine activity, respectively. CONCLUSION: These data suggest that low molecular weight heparin and unfractionated heparin reduce the in vitro binding of antiphospholipid antibodies on a per unit basis. Both heparins demonstrate binding activity similar to that of antiphospholipid antibodies in vitro.

ACCESSION NUMBER: 2003123534 MEDLINE
DOCUMENT NUMBER: 22524446 PubMed ID: 12636948
TITLE: Effects of unfractionated and low molecular weight heparin on antiphospholipid antibody binding in vitro.
AUTHOR: Franklin Rodney D; Kutteh William H
CORPORATE SOURCE: Division of Reproductive Endocrinology and Immunology, Department of Obstetrics & Gynecology, University of Tennessee, 956 Court Avenue, Memphis, TN 38163, USA.
SOURCE: OBSTETRICS AND GYNECOLOGY, (2003 Mar) 101 (3) 455-62. Journal code: 0401101. ISSN: 0029-7844.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 200304
ENTRY DATE: Entered STN: 20030316
Last Updated on STN: 20030404
Entered Medline: 20030403

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